

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**ASF- Keystone, Inc.
3761 Canal Street
East Chicago, Indiana 46312**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T089-5973-00302	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: Expiration Date:

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a steel foundry.

Responsible Official:	R. E. Barker
Source Address:	3761 Canal Street, East Chicago, Indiana 46312
Mailing Address:	10 S. Riverside Plaza, Suite 1000, Chicago, Illinois, 60606
SIC Code:	3325
County Location:	Lake
County Status:	Severe Nonattainment for ozone, Nonattainment for PM10 and SO2, Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD and Emission Offset Rules; Major Source, Section 112 of the Clean Air Act 1 of 28 source categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (1) one (1) scrap and charge handling process for two (2) electric arc furnaces, constructed in 1943, with a maximum charging capacity of 22.7 tons of metal per hour, with emissions uncontrolled and exhausting directly to the atmosphere;
- (2) one (1) electric arc furnace identified as unit 18-A-001, constructed in 1943, with a maximum melt capacity of 4.865 tons of metals per hour and a maximum charging capacity of 11.35 tons of metals per hour, using a baghouse as control, identified as unit 42-A-001, and exhausting to stack ID001;
- (3) one (1) electric arc furnace identified as unit 18-A-002, constructed in 1943, with a maximum melt capacity of 4.865 tons of metals per hour and a maximum charging capacity of 11.35 tons of metals per hour, using a baghouse as control, identified as unit 42-A-002, and exhausting to stack ID002;
- (4) one (1) pouring and casting process, identified as unit 08-L-015, constructed in 1943, with a maximum capacity of 9.73 tons of metal per hour, with emissions uncontrolled;
- (5) one (1) castings cooling process, constructed in 1943, also identified as unit 08-L-015, with a maximum capacity of 9.73 tons of metal per hour, with emissions uncontrolled;
- (6) one (1) sand reclaim system, identified as unit 33-B-RXX, constructed in 1960, with a maximum capacity of 15 tons of sand per hour, consisting of the following facilities:

- (a) one (1) rotary dryer kiln, constructed in 1960, to remove and destroy residual binders and binder decomposition product adhering to the zircon sand, with a maximum heat input capacity of 10.8 million Btu per hour, with emissions controlled by a cyclone, identified as 33-B-R10, and exhausting through stack ID003; and
 - (b) one (1) cooler constructed in 1960, with emissions controlled by a cyclone, identified as 33-B-R11, and exhausting through stack ID003;
- (7) one (1) castings shakeout system, identified as unit 33-B-SXX, constructed in 1979, with a maximum capacity of 250 tons of sand per hour, with emissions controlled by a cyclone and a dust collector identified as unit 47-B-001, and exhausting through stack ID006;
- (8) one (1) sand mixing system, identified as 33-B-MXX, with a maximum capacity of 15 tons of sand per hour, consisting of the following facilities:
 - (a) one (1) sand heater designated as 33-B-027, constructed in 1990 to warm the zircon sand prior to mixing the resins and additives, with a maximum heat input capacity of 0.60 million Btu per hour, with emissions uncontrolled and exhausting inside the building;
 - (b) a screening process with three (3) screens controlled by a cyclone identified as 33-B-M12, with emissions exhausting through stack ID008;
 - (c) one (1) sand mixer, designated as the West mixer, constructed in 1960, controlled by a cyclone identified as 33-B-M13, with emissions exhausting through stack ID008;
 - (d) one (1) sand mixer, designated as the East mixer, constructed in 1960, controlled by cyclone 33-B-M14, with emissions exhausting through stack ID008;
- (9) one (1) North sand reclaim system, identified as unit 33-B-XXX, constructed in 1981, with a maximum capacity of 150 tons of sand per hour, with emissions controlled by a dust collector identified as 47-B-003, and exhausting through stack ID012. This system includes the following equipment:
 - (a) two (2) skip hoists;
 - (b) sand feeders;
 - (c) sand conveyor;
 - (d) magnetic separator;
 - (e) crusher;
 - (f) crushed sand conveyor;
 - (g) elevator;
 - (h) 150 ton bin conveyor belt; and
 - (i) 150 ton bin.

- (10) one (1) surface coating booth, identified as 15-N-001, constructed in 1991, for coating a maximum of 20 fifth wheels (for tractor trailer semi-trucks) per hour, utilizing air atomization spraying, with dry filters for overspray control, with emissions exhausting through stack ID013;
- (11) one (1) surface coating booth, identified as 11-D-006, constructed in 1992, for coating a maximum of 55 steel railcar parts per hour, utilizing air atomization spraying, with dry filters for overspray control, with emissions exhausting through stack ID014;
- (12) one (1) #3 Wheelabrator Tumbblast shotblast machine, identified as 35-D-021, constructed in 1957, with a maximum capacity of 5 tons of steel castings per hour, controlled by a baghouse identified as 49-D-006, with emissions exhausting through stack ID004;
- (13) one (1) #2 Wheelabrator Tumbblast shotblast machine, identified as 35-D-023, constructed in 1975, with a maximum capacity of 5 tons of castings per hour, controlled by a baghouse, identified as 49-D-004, with emissions exhausting through stack ID005;
- (14) fifteen (15) stick welding stations, identified as unit 16-D-XXX, constructed in 1994, with a maximum capacity of 578 electrodes per hour, with emissions uncontrolled and exhausting inside the building;
- (15) carbon arc washing which consists of the use of carbon arc electrodes to burn ("wash") excess metal off steel castings, constructed in 1994, identified as 16-D-ZZZ, with a maximum capacity of 17.5 pounds of carbon arc electrodes per hour, with emissions uncontrolled and exhausting inside the building;
- (16) one (1) woodworking process, identified as B & E Carpenter Shop 22-H-XXX, with emissions controlled by a cyclone, with particulate matter emissions after controls less than 5 pounds per hour and 15 pounds per day;

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour including but not limited to the following units:
 - (a) two (2) boilers for quench system, constructed in 1989, each with a maximum heat input capacity of 0.25 million British thermal units per hour; [326 IAC 6-1-2]
 - (b) two (2) resin heater boilers, constructed in 1985, each with a maximum heat input capacity of 0.116 million British thermal units per hour; and [326 IAC 6-1-2]
 - (c) one (1) Personnel boiler, constructed in 1988, with a maximum heat input capacity of 2.512 million British thermal units per hour. [326 IAC 6-1-2]
- (2) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (3) Grinding and machining operations, uncontrolled. [326 IAC 6-1-2]

- (4) one (1) woodworking process, identified as Pattern Shop 15-K-XXX, with emissions controlled by a cyclone and a Dust Collector baghouse with an outlet grain loading less than 0.03 gr/acfm and a flow rate less than 4,000 acfm.
[326 IAC 6-1-2]
- (5) Paved and unpaved roads and parking lots with public access. [326 IAC 6-1-11.1]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22); and
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, IDEM Northwest Office, and the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, and IDEM Northwest Regional Office within a

reasonable time, any information that IDEM, OAQ, and IDEM Northwest Regional Office may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, and IDEM Northwest Regional Office copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]

- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and IDEM Northwest Regional Office on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, and IDEM Northwest Regional Office may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

-
- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

- (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
- (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and IDEM Northwest Regional Office upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and IDEM Northwest Regional Office. IDEM, OAQ, and IDEM Northwest Regional Office may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or IDEM Northwest Regional Office makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or IDEM Northwest Regional Office within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and IDEM Northwest Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

and

IDEM Northwest Regional Office
Telephone Number: (219) 881-6712
Facsimile Number: (219) 881-6745

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, and IDEM Northwest Office may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, and IDEM Northwest Office by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after

the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.
- (c) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following determinations regarding this source:
 - (1) The requirements of 326 IAC 8-7 (Specific VOC Emission Reduction Requirements for Lake, Porter, Clark, and Floyd Counties) are not applicable to this source, because the potential to emit VOC from the source (excluding exempted facilities as listed in the rule) is less than 25 tons per year.
- (d) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, or IDEM Northwest Office shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (e) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (f) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (g) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (h) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, or IDEM Northwest Office has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (i) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, or IDEM Northwest Office has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.

The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
- (2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (a) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as

defined by 326 IAC 2-7-1(34).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ or IDEM Northwest Regional Office determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, or IDEM Northwest Regional Office to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, or IDEM Northwest Office at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, or IDEM Northwest Office may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and IDEM Northwest Office and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
 - (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and IDEM Northwest Office, on or before the date it is due.
- (2) If IDEM, OAQ, and IDEM Northwest Office upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.
- (c) **Right to Operate After Application for Renewal** [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, and IDEM Northwest Office take final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, and IDEM Northwest Office any additional information identified as being needed to process the application.
- (d) **United States Environmental Protection Agency Authority** [326 IAC 2-7-8(e)]
If IDEM, OAQ, and IDEM Northwest Office fail to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)]

[326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
 - (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-

20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, and IDEM Northwest Office in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a).

For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, IDEM Northwest Regional Office, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2] [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, IDEM Northwest Regional Office, and U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, any records that must be kept under the conditions of this permit;

- (c) Inspect, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, and IDEM Northwest Regional Office within thirty (30) calendar days of receipt of a billing. Pursuant 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, or IDEM Northwest Regional Office the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.5 Continuous Compliance Plan [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 (Lake County PM₁₀ Emission Requirements), the Permittee shall maintain at the source a copy of the Continuous Compliance Plan (CCP). The Permittee shall perform the inspections, monitoring, and record keeping requirements as specified in 326 IAC 6-1-10.1(p) through (r) or according to the Permittee's CCP.

C.6 Fugitive Dust Emissions [326 IAC 6-1-11.1] [326 IAC 6-1-11.2]

- (1) Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:
 - (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
 - (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
 - (c) The average instantaneous opacity of fugitive particulate emissions from batch

transfer shall not exceed ten percent (10%).

- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the approved Fugitive Dust Control Plan submitted on May 31, 1996. A copy of the plan is included as Attachment A.

- (2) The source is subject to 326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures) because it is subject to the requirements of 326 IAC 6-1-11.1. Pursuant to this rule, the source shall comply with parts (k), (l), (m), (o), (p), and (q) of this rule.

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61 Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not

asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.10 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and IDEM Northwest Regional Office not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and IDEM Northwest Regional Office, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.11 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days.

provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

C.13 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.15 Pressure Gauge Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ or the IDEM Northwest Regional Office the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, and the IDEM Northwest Regional Office, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.18 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:
 - (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ, and IDEM Northwest Office upon request and shall be subject to review and approval by IDEM, OAQ, and IDEM Northwest Office. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.
- (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.

- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
- (f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
[326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in

compliance with 326 IAC 2-6 (Emission Reporting);

- (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and IDEM Northwest Office on or before the date it is due.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or IDEM Northwest Regional Office makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or IDEM Northwest Regional Office within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and IDEM Northwest Office on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

one (1) scrap and charge handling process for two (2) electric arc furnaces, constructed in 1943, with a maximum charging capacity of 22.7 tons of metal per hour, with emissions uncontrolled and exhausting directly to the atmosphere.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter Limitations [326 IAC 6-1-11.1]

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements) the particulate matter emissions from the scrap and charge handling process shall be limited as follows:

- (a) The opacity of fugitive particulate emissions shall not exceed ten percent (10%).
- (b) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or a part of the scrap and charge handling process, except from a vent in the building.
- (c) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.

Compliance Determination Requirements

D.1.2 Particulate Matter Compliance [326 IAC 6-1-11.1]

- (a) Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), compliance with the opacity limits specified in Condition D.1.1(a), (b), and (c) shall be achieved by controlling fugitive particulate matter emissions according to the Fugitive Dust Control Plan (FDCP), submitted May 31, 1996 (Attachment A). If it is determined that the control procedures specified in the FDCP do not demonstrate compliance with the fugitive emission limitations, IDEM, OAQ may request that the FDCP be revised and submitted for approval.
- (b) Compliance with the opacity limitations listed in Condition D.1.1(b) and (c) shall be determined by 40 CFR 60 Appendix A, Method 9.
- (c) Compliance with the opacity limitation in Condition D.1.1(a) shall be determined by 40 CFR 60, Appendix A, Method 22.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) one (1) electric arc furnace identified as units 18-A-001, constructed in 1943, with a maximum melt capacity of 4.865 tons of metals per hour and a maximum charging capacity of 11.35 tons of metals per hour, using a baghouse as control, identified as unit 42-A-001, and exhausting to stack ID001;
- (b) one (1) electric arc furnace identified as unit 18-A-002, constructed in 1943, with a maximum melt capacity of 4.865 tons of metals per hour and a maximum charging capacity of 11.35 tons of metals per hour, using a baghouse as control, identified as unit 42-A-002, and exhausting to stack ID002;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Lake County PM10 Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1 the PM10 emissions from both of the electric arc furnaces #1 and #2 combined shall not exceed 0.104 pound per ton of metal melted and 1.248 pounds per hour (total for both furnaces).

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these furnaces and baghouses.

Compliance Determination Requirements

D.2.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 12 months after issuance of this permit, the Permittee shall perform PM10 testing using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.2.1. This test shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.2.4 Emission Controls

In order to comply with Condition D.2.1, the baghouses for particulate matter control shall be in operation and control emissions from the electric arc furnaces at all times when the furnaces are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.5 Visible Emissions Notations

- (a) Visible emission notations of both of the electric arc furnace baghouse stack exhausts ID001 and ID002 shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the electric arc furnaces, at least once per shift when the electric arc furnaces are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the electric arc furnaces when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.2.8 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Record Keeping Requirements

- (a) In order to document compliance with Condition D.2.5, the Permittee shall maintain records of visible emission notations of the electric arc furnaces stack exhaust(s) once per shift.
- (b) In order to document compliance with Condition D.2.6, the Permittee shall maintain records of the following operational parameters once per shift during normal operation when venting to the atmosphere:
 - (1) Inlet and outlet differential static pressure; and
 - (2) Cleaning cycle operation.
- (c) In order to document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) one (1) pouring and casting process, identified as unit 08-L-015, constructed in 1943, with a maximum capacity of 9.73 tons of metal per hour, with emissions uncontrolled;
- (b) one (1) castings cooling process, constructed in 1943, also identified as unit 08-L-015, with a maximum capacity of 9.73 tons of metal per hour, with emissions uncontrolled;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, the PM emissions from the pouring/casting process and the castings cooling process shall not exceed 0.03 grains per dry standard cubic foot of exhaust air each.

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

one (1) sand reclaim system, identified as unit 33-B-RXX, constructed in 1960, with a maximum capacity of 15 tons of sand per hour, consisting of the following facilities:

- (a) one (1) rotary dryer kiln, constructed in 1960, to remove and destroy residual binders and binder decomposition product adhering to the zircon sand, with a maximum heat input capacity of 10.8 million Btu per hour, with emissions controlled by a cyclone, identified as 33-B-R10, and exhausting through stack ID003; and
- (b) one (1) cooler constructed in 1960, with emissions controlled by a cyclone, identified as 33-B-R11, and exhausting through stack ID003;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Lake County PM10 Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1, the PM10 emissions from the sand kiln and cooler combined shall each not exceed 0.636 pound per of product output and 16.29 pounds per hour (total for both units).

D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices.

Compliance Determination Requirements

D.4.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 12 months after the issuance of this permit, the Permittee shall perform PM10 testing on both the rotary dry kiln and cooler using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.4.1. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.4.4 Particulate Matter (PM)

In order to comply with Condition D.4.1, the cyclones for PM control shall be in operation and control emissions from the rotary sand kiln and cooler at all times when the rotary sand kiln and cooler are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.5 Visible Emissions Notations

- (a) Visible emission notations of the rotary dryer kiln and cooler stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.4.6 Cyclone Inspections

An inspection shall be performed each calendar quarter of all cyclones controlling the rotary dryer kiln and cooler when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

D.4.7 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.8 Record Keeping Requirements

- (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of visible emission notations of the stack exhaust once per shift.
- (b) To document compliance with Condition D.4.6, the Permittee shall maintain records of the results of the inspections required under Condition D.4.6.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

one (1) castings shakeout system, identified as unit 33-B-SXX, constructed in 1979, with a maximum capacity of 250 tons of sand per hour, with emissions controlled by a cyclone and a dust collector identified as unit 47-B-001, and exhausting through stack ID006;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 PM10 Emissions [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1, the PM10 emissions from the castings shakeout system dust collector shall not exceed 0.012 pound per ton of product output from the shakeout system and 0.384 pounds per hour. Compliance with this limit will also render the requirements of 326 IAC 2-3 (Emission Offsets) not applicable.

D.5.2 PM Emissions [326 IAC 2-3]

In order to render the requirements of 326 IAC 2-3 (Emission Offsets) not applicable, the PM emissions from the castings shakeout system shall not exceed 11.2 pounds per hour and 1.15 pounds per ton of steel castings.

D.5.3 VOC Emissions [326 IAC 2-3]

In order to render the requirements of 326 IAC 2-3 (Emission Offsets) not applicable, the VOC emissions from the castings shakeout system shall not exceed 11.2 pounds per hour and 1.15 pounds per ton of steel castings.

D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control device.

Compliance Determination Requirements

D.5.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 12 months after the issuance of this permit, the Permittee shall perform PM, PM10, and VOC testing on the shakeout process using methods as approved by the Commissioner, in order to demonstrate compliance with conditions D.5.1, D.5.2, and D.5.3. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.5.6 Particulate Matter (PM)

In order to comply with Conditions D.5.1 and D.5.2, the cyclone and dust collector for PM control shall be in operation and control emissions from the castings shakeout process at all times when the castings shakeout process is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.7 Visible Emissions Notations

-
- (a) Visible emission notations of the castings shakeout stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
 - (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
 - (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
 - (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
 - (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.5.8 Baghouse Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the shakeout system, at least once per shift when the shakeout system is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.9 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the shakeout system when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.5.10 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.11 Record Keeping Requirements

- (a) To document compliance with Condition D.5.7, the Permittee shall maintain records of visible emission notations of the baghouse stack exhaust once per shift.
- (b) In order to document compliance with Condition D.5.8, the Permittee shall maintain records of the following operational parameters once per shift during normal operation when venting to the atmosphere:
 - (1) Inlet and outlet differential static pressure; and
 - (2) Cleaning cycle operation.
- (c) To document compliance with Condition D.5.9, the Permittee shall maintain records of the results of the inspections required under Condition D.5.9.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

one (1) sand mixing system, identified as 33-B-MXX, with a maximum capacity of 15 tons of sand per hour, consisting of the following facilities:

- (a) one (1) sand heater designated as 33-B-027, constructed in 1990 to warm the zircon sand prior to mixing the resins and additives, with a maximum heat input capacity of 0.60 million Btu per hour, with emissions uncontrolled and exhausting inside the building;
- (b) a screening process with three (3) screens controlled by a cyclone identified as 33-B-M12, with emissions exhausting through stack ID008;
- (c) one (1) sand mixer, designated as the West mixer, constructed in 1960, controlled by a cyclone identified as 33-B-M13, with emissions exhausting through stack ID008;
- (d) one (1) sand mixer, designated as the East mixer, constructed in 1960, controlled by cyclone 33-B-M14, with emissions exhausting through stack ID008;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, the PM emissions from the screening process shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

D.6.2 Lake County PM10 Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1, the combined PM10 emissions from both of the sand mixers combined shall not exceed 0.520 pound per ton of product output from the mixers and 11.44 pounds per hour.

D.6.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices.

Compliance Determination Requirements

D.6.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 12 months after issuance of this permit, the Permittee shall perform PM10 testing on the both of the sand mixers simultaneously, while both the sand mixers are operating at 95% of maximum capacity, using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.6.2. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.6.5 Particulate Matter (PM)

In order to comply with Conditions D.6.1 and D.6.2, the cyclones for PM control shall be in operation at all times and control emissions from the sand mixers and screeners, at all times when these processes are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.6 Visible Emissions Notations

- (a) Visible emission notations of each of the controlled stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.6.7 Cyclone Inspections

An inspection shall be performed each calendar quarter of all cyclones controlling the sand mixing operation when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

D.6.8 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.9 Record Keeping Requirements

- (a) To document compliance with Condition D.6.6, the Permittee shall maintain records of visible emission notations of the process stack exhausts once per shift.
- (b) To document compliance with Condition D.6.7, the Permittee shall maintain records of the results of the inspections required under Condition D.6.7.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

one (1) North sand reclaim system, identified as unit 33-B-XXX, constructed in 1981, with a maximum capacity of 150 tons of sand per hour, with emissions controlled by a dust collector identified as 47-B-003, and exhausting through stack ID012. This system includes the following equipment:

- (a) two (2) skip hoists;
- (b) sand feeders;
- (c) sand conveyor;
- (d) magnetic separator;
- (e) crusher;
- (f) crushed sand conveyor;
- (g) elevator;
- (h) 150 ton bin conveyor belt; and
- (i) 150 ton bin.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate Matter (PM) [326 IAC 6-1-2] [326 IAC 2-3]

- (a) Pursuant to 326 IAC 6-1-2, the PM emissions from the north sand reclaim system shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.
- (b) In order to render the requirements of 326 IAC 2-3 (Emission Offsets) not applicable, the PM emissions from the north sand reclaim system shall not exceed 5.48 pounds per hour and 0.037 pounds per ton of steel castings. Compliance with this limit will render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

D.7.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices.

Compliance Determination Requirements

D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 12 months after issuance of this permit, the Permittee shall perform PM testing on the north sand reclaim system, using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.7.1. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.7.4 Particulate Matter (PM)

In order to comply with Condition D.7.1, the baghouse for PM control shall be in operation at all times and control emissions from the North sand reclaim system when the North sand reclaim system is in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.5 Visible Emissions Notations

- (a) Visible emission notations of the baghouse stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.7.6 Baghouse Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouse used in conjunction with the North sand reclaim system, at least once per shift when the North sand reclaim system is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.7.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the North sand reclaim system when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.7.8 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.9 Record Keeping Requirements

- (a) To document compliance with Condition D.7.5, the Permittee shall maintain records of visible emission notations of the baghouse stack exhaust once per shift.
- (b) To document compliance with Condition D.7.6, the Permittee shall maintain records of the following operational parameters once per shift during normal operation when venting to the atmosphere:
 - (1) Inlet and outlet differential static pressure; and
 - (2) Cleaning cycle operation.
- (c) To document compliance with Condition D.7.7, the Permittee shall maintain records of the results of the inspections required under Condition D.7.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) one (1) surface coating booth, identified as 15-N-001, constructed in 1991, for coating a maximum of 20 fifth wheels (for tractor trailer semi-trucks) per hour, utilizing air atomization spraying, with dry filters for overspray control, with emissions exhausting through stack ID013;
- (b) one (1) surface coating booth, identified as 11-D-006, constructed in 1992, for coating a maximum of 55 steel railcar parts per hour, utilizing air atomization spraying, with dry filters for overspray control, with emissions exhausting through stack ID014;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 VOC Emissions [326 IAC 8-2-9] [326 IAC 2-3]

- (a) Pursuant to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) the following conditions shall apply to both spray booths:
 - (1) The volatile organic compound (VOC) content of coating delivered to the applicators at the spray booths shall be limited to 3.5 pounds of VOCs per gallon of coating less water.
 - (2) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (b) In order to render the requirements of 326 IAC 2-3 (Emission Offset) not applicable, both of the surface coating booths combined shall use less than 24.31 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per 12 consecutive month period. This usage limit is required to limit the potential to emit of VOC to less than 25 tons per twelve (12) consecutive month period in order that the modification be considered de minimis, as defined by 326 IAC 2-3-1(j). Compliance with this limit makes 326 IAC 2-3 (Emission Offset) not applicable.

D.8.2 PM Limitations [326 IAC 6-1-2] [326 IAC 2-3]

- (a) Pursuant to 326 IAC 6-1-2, the PM emissions from each of the surface coating booths shall not exceed 0.03 grains per dry standard cubic foot of exhaust air. Compliance with these limits will also render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.
- (b) In order to render the requirements of 326 IAC 2-3 (Emission Offsets) not applicable, the PM emissions from each of the surface coating booths shall not exceed 5.48 pounds per hour. Compliance with this limit will render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

D.8.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.8.4 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Condition D.8.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAQ, and IDEM Northwest Office reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.8.5 VOC Emissions

Compliance with Condition D.8.1 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

D.8.6 Particulate Matter (PM)

In order to comply with Condition D.8.2, the two sets of dry filters for PM control shall be in place at all times when the two (2) paint booths (15-N-001 and 11-D-006) are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.8.7 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Daily inspections shall be performed of the plenum behind the dry filters to determine if overspray has occurred. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.8 Record Keeping Requirements

- (a) To document compliance with Condition D.8.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.8.1.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;

- (3) The volume weighted VOC content of the coatings used for each month;
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each month; and
 - (6) The weight of VOCs emitted for each compliance period.
- (b) To document compliance with Condition D.8.7, the Permittee shall maintain a log of daily observations of the plenum behind the dry filters, daily inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.8.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.8.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) one (1) #3 Wheelabrator Tumblast shotblast machine, identified as 35-D-021, constructed in 1957, with a maximum capacity of 5 tons of steel castings per hour, controlled by a baghouse identified as 49-D-006, with emissions exhausting through stack ID004;
- (b) one (1) #2 Wheelabrator Tumblast shotblast machine, identified as 35-D-023, constructed in 1975, with a maximum capacity of 5 tons of castings per hour, controlled by a baghouse, identified as 49-D-004, with emissions exhausting through stack ID005;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.9.1 Lake County PM10 Emission Requirements [326 IAC 6-1-10.1]

Pursuant to 326 IAC 6-1-10.1, the PM10 emissions from each of the Wheelabrator Tumblast shotblast machines shall not exceed 0.145 pound per ton of metal produced and 0.678 pounds per hour.

D.9.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices.

Compliance Determination Requirements

D.9.3 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 12 months after issuance of this permit, the Permittee shall perform PM10 testing on each of the Wheelabrator Tumblast shotblast machines, using methods as approved by the Commissioner, in order to demonstrate compliance with condition D.9.1. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C - Performance Testing.

D.9.4 Particulate Matter (PM)

In order to comply with Condition D.9.1, the baghouses for particulate matter control shall be in operation and control emissions from the Wheelabrator Tumblast shotblast machines at all times when the Wheelabrator Tumblast shotblast machines are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.9.5 Visible Emissions Notations

- (a) Visible emission notations of each of the baghouse stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.9.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with each of the Wheelabrator Tumblast shotblast machines, at least once per shift when the shotblasters are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 2.0 and 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.9.7 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling each of the Wheelabrator Tumblast shotblast machines when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.9.8 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.9 Record Keeping Requirements

- (a) To document compliance with Condition D.9.5, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts once per shift.
- (b) To document compliance with Condition D.9.6, the Permittee shall maintain records of the following operational parameters once per shift during normal operation when venting to the atmosphere:
 - (1) Inlet and outlet differential static pressure; and
 - (2) Cleaning cycle operation.
- (c) To document compliance with Condition D.9.7, the Permittee shall maintain records of the results of the inspections required under Condition D.9.7 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.10 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) fifteen (15) stick welding stations, identified as unit 16-D-XXX, constructed in 1994, with a maximum capacity of 578 electrodes per hour, with emissions uncontrolled and exhausting inside the building; and
- (b) carbon arc washing which consists of the use of carbon arc electrodes to burn ("wash") excess metal off steel castings, constructed in 1994, identified as 16-D-ZZZ, with a maximum capacity of 17.5 pounds of carbon arc electrodes per hour, with emissions uncontrolled and exhausting inside the building;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.10.1 Particulate Matter [326 IAC 6-1-2] [326 IAC 2-3]

- (a) Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the fifteen stick welding stations shall not exceed 0.03 grains per dry standard cubic foot of exhaust air. This is equivalent to 2.25 pounds per hour.
- (b) Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from the carbon arc washing process shall not exceed 0.03 grains per dry standard cubic foot of exhaust air. This is equivalent to 3.09 pounds per hour.
- (c) In order to render the requirements of 326 IAC 2-3 (Emission Offsets) not applicable, the PM10 emissions from the fifteen stick welding stations and the carbon arc washing process shall not exceed 3.20 pounds per hour.

Therefore, the requirements of 326 IAC 2-3 (Emission Offset) are not applicable.

SECTION D.11

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

Insignificant Activities including the following:

- (a) two (2) boilers for quench system, constructed in 1989, each with a maximum heat input capacity of 0.25 million British thermal units per hour;
- (b) two (2) resin heater boilers, constructed in 1985, each with a maximum heat input capacity of 0.116 million British thermal units per hour;
- (c) one (1) Personnel boiler, constructed in 1988, with a maximum heat input capacity of 2.512 million British thermal units per hour;

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.11.1 Particulate Matter Limitation (PM) [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2(b)(5) (Nonattainment Area Particulate Limitations), the PM emissions from each of the boilers shall be limited to 0.01 grains per dry standard cubic foot of exhaust air.

SECTION D.12 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activities including the following:

Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 20-6.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.12.1 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.12.2 Volatile Organic Compounds (VOC)

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the

cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990 shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION D.13 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Significant Woodworking activities as follows:

- (a) one (1) woodworking process, identified as B & E Carpenter Shop 22-H-XXX, with emissions controlled by a cyclone; and

Insignificant Activities including the following:

- (a) Grinding and machining operations uncontrolled; and
- (b) one (1) woodworking process, identified as Pattern Shop 15-K-XXX, with emissions controlled by a cyclone and a Dust Collector baghouse.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.13.1 Nonattainment Area Particulate Limitations [326 IAC 6-1-2]

Pursuant to 326 IAC 6-1-2, the PM emissions from each of the processes listed above shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

Compliance Determination Requirements

D.13.2 Particulate Matter (PM)

In order to comply with Condition D.13.1, the PM control devices for PM control shall be in operation and control emissions from the each of the processes listed above at all times when the processes are in operation.

D.13.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the cyclone controlling the B & E Carpenter Shop.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.13.4 Visible Emissions Notations

- (a) Visible emission notations of the B & E Carpenter shop stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.13.5 Cyclone Inspections

An inspection shall be performed each calendar quarter of the cyclones controlling the B & E Carpenter Shop when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.

D.13.6 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.13.7 Record Keeping Requirements

- (a) To document compliance with Condition D.13.4, the Permittee shall maintain records of visible emission notations of the stack exhaust once per shift.
- (b) To document compliance with Condition D.13.5, the Permittee shall maintain records of the results of the inspections required under Condition D.13.5.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
IDEM Northwest Office
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: ASF-Keystone, Inc.
Source Address: 3761 Canal Street, East Chicago, Indiana 46312
Mailing Address: 10 S. Riverside Plaza, Suite 1000, Chicago, Illinois, 60606
Part 70 Permit No.: T089-5973-00302

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**IDEM Northwest Office
Telephone Number: (219) 881-6712
Facsimile Number: (219) 881-6745**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: ASF-Keystone, Inc.
Source Address: 3761 Canal Street, East Chicago, Indiana 46312
Mailing Address: 10 S. Riverside Plaza, Suite 1000, Chicago, Illinois, 60606
Part 70 Permit No.: T089-5973-00302

This form consists of 2 pages

Page 1 of 2

- | |
|---|
| <p>9 This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none"><input type="checkbox"/> The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and<input type="checkbox"/> The Permittee must submit notice by mail or facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16. |
|---|

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
IDEM Northwest Office

Part 70 Quarterly Report

Source Name: ASF-Keystone, Inc.
Source Address: 3761 Canal Street, East Chicago, Indiana 46312
Mailing Address: 10 S. Riverside Plaza, Suite 1000, Chicago, Illinois, 60606
Part 70 Permit No.: T089-5973-00302
Facilities: Fifth wheel surface coating booth and C & F surface coating booth
Parameter: VOC usage
Limit: Both of the surface coating booths combined shall use less than 24.31 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per 12 consecutive month period.

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

A certification is required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
IDEM Northwest Office
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: ASF-Keystone, Inc.
Source Address: 3761 Canal Street, East Chicago, Indiana 46312
Mailing Address: 10 S. Riverside Plaza, Suite 1000, Chicago, Illinois, 60606
Part 70 Permit No.: T089-5973-00302

Months: _____ to _____ Year: _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: ASF-Keystone, Inc.
Source Location: 3761 Canal Street, East Chicago, Indiana 46312
County: Lake
SIC Code: 3325
Operation Permit No.: T089-5973-00302
Permit Reviewer: Nisha Sizemore

On November 8, 2000, the Office of Air Quality (OAQ) had a notice published in the Gary Post Tribune, Merrillville, Indiana, and The Times, Munster, Indiana, stating that American Steel Foundries (now named ASF-Keystone) had applied for a Part 70 Operating Permit to operate a steel foundry. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On December 1, 2000, ASF-Keystone, Inc. submitted comments on the proposed Part 70 permit. The summary of the comments is as follows:

Comment #1

The name of the company has been changed to ASF-Keystone, Inc.

Response #1

The requested change has been made throughout the permit.

Comment #2

The table of contents should include Condition D.2.7 (Baghouse Inspections). Subsequent Conditions should be renumbered accordingly.

Response #2

The requested change has been made.

Comment #3

The title of Section D.4 in the table of contents should be "sand reclaim system" instead of "mold and core sand system." This is consistent with the description box in D.4.

Response #3

The requested change has been made.

Comment #4

Please explicitly define the authority of the IDEM East Chicago Local Agency regarding air inspections, and other actions under Indiana Administrative Code and the United States Code of Federal Regulations.

Response #4

The East Chicago Local Agency does not have the authority to conduct air inspections for OAQ. All references to the East Chicago Local Agency have been removed from the permit.

Comment #5

Regarding Condition D.7.1(b), why is the emission limit 1.0 pound per hour less than the limit in the original draft?

Response #5

The limit in the original draft was incorrect. IDEM originally miscalculated the limit in a draft prior to the public notice version of the draft. The calculations included with the public notice version of the permit were correct. The PM emission limit in D.7.1(b) is necessary in order to render the requirements of 326 IAC 2-3 (Emission Offset) not applicable to the North sand reclaim system.

Comment #6

Regarding the compliance monitoring conditions for the surface coating booths, it is too dangerous for someone to be climbing on the roof to check the stacks during the winter months. We will agree to use double filters at the paint booths and check the plenum behind the filters each time the filters are changed.

Response #6

IDEM agrees with the source's proposal for monitoring the overspray. Condition D.8.6 has been modified to require double filters, as shown below. This condition is a compliance determination requirement, not a compliance monitoring requirement. As a result, the condition as shown below has been relocated to the section labelled Compliance Determination Requirements.

D.8.6 Particulate Matter (PM)

In order to comply with Condition D.8.2, the **two sets of** dry filters for PM control shall be in place at all times when the two (2) paint booths (15-N-001 and 11-D-006) are in operation.

Paragraph (b) of Condition D.8.7 has already been modified to allow for monitoring the plenum behind the filters instead of going to the roof to check for overspray. Paragraph (a) has been modified to clarify the requirements of the Condition.

D.8.7 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. ~~To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks 013 and 014~~

~~while one or more of the booths are in operation.~~ The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (b) Daily inspections shall be performed of the plenum behind the dry filters to determine if overspray has occurred. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Comment #7

The calculations on page 10 of Appendix A give the impression that VOCs are controlled when actually, they are not controlled.

Response #7

The requested change has been made to Appendix A. No changes to the permit are necessary.

Upon further review, the OAQ has decided to make the following changes to the permit.

Front Page

- (1) The expiration date has been added to the signature box. The expiration date is exactly 5 years after the issuance date.

Operation Permit No.: T089-5973-00302	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: Expiration Date:

Section A

- (1) The following rule cite has been added to A.1 (General Information). The rule cite includes the definition

of a major source in 326 IAC 2-7. The source is located in a part of Lake County that has been designated as attainment or unclassifiable for CO.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] **[326 IAC 2-7-1(22)]**

The Permittee owns and operates a steel foundry.

Responsible Official: R. E. Barker
Source Address: 3761 Canal Street, East Chicago, Indiana 46312
Mailing Address: 10 S. Riverside Plaza, Suite 1000, Chicago, Illinois, 60606
SIC Code: 3325
County Location: Lake
County Status: Severe Nonattainment for ozone, Nonattainment for ~~CO~~ PM10 and SO2, Attainment for all other criteria pollutants
Source Status: Part 70 Permit Program
Major Source under PSD and Emission Offset Rules;
Major Source, Section 112 of the Clean Air Act
1 of 28 source categories

- (2) For clarification purposes, the following change has been made to item (13) in Section A.2. This change has also been made in the description box in Section D.9.

- (13) one (1) #2 Wheelabrator Tumblast shotblast machine, identified as 35-D-023, constructed in 1975, with a maximum capacity of 5 tons **of castings** per hour, controlled by a baghouse, identified as 49-D-004, with emissions exhausting through stack ID005;

Section B

- (1) Regarding Condition B.2 (Permit Term), language has been added to clarify that amendments, revisions or modifications do not extend the expiration date of the permit. The expiration date will always be 5 years from the issuance date of the original permit.

B.2 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the ~~effective~~ **original** date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. **Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.**

- (2) Condition B.7 (Duty to Supplement and Provide Information) has been reworded to match the language in the rule.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]
[326 IAC 2-7-6(6)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015

Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, and IDEM Northwest Regional Office within a reasonable time, any information that IDEM, OAQ, and IDEM Northwest Regional Office may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). **Upon request, the Permittee shall also furnish to IDEM, OAQ, and IDEM Northwest Regional Office copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]**
- (c) ~~Upon request, the Permittee shall also furnish to IDEM, OAQ, and IDEM Northwest Regional Office copies of records required to be kept by this permit. The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. If requested by IDEM, OAQ, or the U.S. EPA, to~~ **When** furnishing copies of requested records directly to U. S. EPA, ~~then the Permittee must furnish record directly to the U. S. EPA.~~ The Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.
- (3) Subsection (c) has been added to Condition B.8 (Compliance with Permit Conditions) to clarify that an emergency does constitute a defense in an enforcement action if the Permittee complies with the emergency procedures.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:
- (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) **An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in**

condition B, Emergency Provisions.

- (4) Subsection (b) of Condition B.9 (Certification) has been modified to clarify when a certification is needed.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

- (b) One (1) certification shall be included, ~~on~~ **using** the attached Certification Form, with each submittal **requiring certification**.

- (5) Subsection (a) of Condition B.10 (Annual Compliance Certification) has been revised to clarify that the initial certification is from the date of issuance until December 31. Paragraph (c) has been revised so that it matches the language in the rule.

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. **The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent** ~~The certifications~~ shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and IDEM Northwest Regional Office on or before the date it is due.
- (c) The annual compliance certification report shall include the following:

- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
- (2) The compliance status;
- (3) Whether compliance was continuous or intermittent;
- (4) The methods used for determining **the** compliance **status** of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ, and IDEM Northwest Regional Office may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The record keeping requirements have been added to Condition B.11 (Preventive Maintenance Plan).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond ~~it's~~ the **Permittee's** control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

The PMP and the PMP extension notification do not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and IDEM Northwest Regional Office upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and IDEM Northwest Regional Office. IDEM, OAQ, and IDEM Northwest Regional Office may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).
- (d) **Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or IDEM Northwest Regional Office makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or IDEM Northwest Regional Office within a reasonable time.**

- (7) In Condition B.12 (Emergency Provisions), the telephone number and facsimile number for the Northwest Regional Office have been corrected.

IDEM Northwest Regional Office
Telephone Number: (219) ~~245-4875~~ **881-6712**
Facsimile Number: (219) ~~391-8237~~ **881-6745**

- (8) In Subsection (d) of Condition B.16 (Permit Modification, Reopening, Revocation and Reissuance, or Termination) the “and” has been changed to “or” since the reopening could be done by either the local or the state agency.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, **or** ~~and~~ IDEM Northwest Office at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, **or** ~~and~~ IDEM Northwest Office may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

- (9) Subsection (b) of Condition B.20 (Operational Flexibility) has been reorganized. Paragraph (b)(1) was taken out so the condition would be consistent with the language in the rule.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a).

~~and the following additional conditions:~~

~~(1) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).~~

~~(2) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:~~

~~(A)(1) A brief description of the change within the source;~~

~~(B)(2) The date on which the change will occur;~~

~~(C)(3) Any change in emissions; and~~

~~(D)(4) Any permit term or condition that is no longer applicable as a result of the change.~~

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (10) In Condition B.21 (Source Modification Requirement), 326 IAC 2 has been added to make the condition more complete. The language "applicable provisions" has been removed because it is unnecessary.

B.21 Source Modification Requirement [326 IAC 2] [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by ~~the applicable provisions of 326 IAC 2 and~~ 326 IAC 2-7-10.5.

- (11) B.22 (Inspection and Entry) "At reasonable times" has been deleted because neither the rule nor the statute impose such limits.

B.22 Inspection and Entry [326 IAC 2-7-6(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, and IDEM Northwest Regional Office U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, ~~at reasonable times,~~ any records that must be kept under the conditions of this permit;
- (c) Inspect, ~~at reasonable times,~~ any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

- (d) Sample or monitor, ~~at reasonable times,~~ substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.
~~[326 IAC 2-7-6(6)]~~

(12) The following rule cite to paragraph (a) of Condition B.24 (Annual Fee Payment).

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, and IDEM Northwest Regional Office within thirty (30) calendar days of receipt of a billing. **Pursuant 326 IAC 2-7-19(b),** if the Permittee does not receive a bill from IDEM, OAQ, or IDEM Northwest Regional Office the applicable fee is due April 1 of each year.

Section C

(1) The following revisions were made to clarify Condition C.7 (Operation of Equipment).

C.7 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided **by statute, rule, or** in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

(2) In Condition C.8 (Stack Height) language has been added to clarify which parts of 326 IAC 1-7 are not federally enforceable.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. **The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.**

(3) In Condition C.9 (Asbestos Abatement Projects) the rule cite in the title was changed to make it more generalized.

**C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] ~~[40 CFR 61.140]~~
[40 CFR 61, Subpart M]**

(4) In Subsection (c) of Condition C.10 (Performance Testing) the word "within" has been changed to "not later than" in order to be consistent with the language in the rule.

C.10 Performance Testing [326 IAC 3-6]

- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and IDEM Northwest Regional Office ~~within~~ **not later than** forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and IDEM Northwest Regional Office, if the source submits to IDEM, OAQ, a reasonable written explanation ~~within~~ **not later than** five (5) days prior to the end of the initial forty-five (45) day period.
- (5) There may be situations where a new rule has been promulgated (such as a new MACT rule) and the Conditions may be included in the permit modification, even though the source may not have to comply with those requirements until a later date. In such cases, the Conditions would specify that compliance with those requirements was not required until a certain date. Therefore, to allow for this possibility, language has been added to Condition C.12 (Compliance Monitoring) to clarify that the permit will specify when compliance monitoring doesn't have to start in 90 days. The same idea applies to new units.

C.12 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

IDEM Northwest Regional Office
NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

- (6) The language of Condition C.13 (Maintenance of Emission Monitoring Equipment) has been changed slightly to clarify the intent.

C.13 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less **often** than once **an** ~~(4)~~ hour until such time as the continuous monitor is back in operation.

- (7) The following rule cites have been added to Condition C.14 (Monitoring Methods).

C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, **40 CFR 60 Appendix B, 40 CFR 63**, or other approved methods as specified in this permit.

- (8) Rule cites have been added to Condition C.15 (Pressure Gauge Specifications).

C.15 Pressure Gauge Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

- (9) Changes have been made to Condition C.17 (Risk Management Plan) because, if a source is subject to 40 CFR 68, they should have already submitted a Risk Management Plan.

C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68 ~~by the date provided in 40 CFR 68.10(a)~~; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (10) Minor grammatical changes were made to Condition C.18 (Compliance Monitoring Plan - Failure to Take Response Steps). In Subsection (c) "or" has been replaced with a period. In Subsection (f) "(5%)" has been added to be consistent with the rest of the permit. Also, changes were made to (a)(5) and (f) due to frequently asked questions from sources.

C.18 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps ~~shall~~ **may** constitute a violation of the permit.
 - (c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied. ~~;~~ ~~or~~
 - (3) An automatic measurement was taken when the process was not operating. ~~;~~ ~~or~~
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
 - (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
 - (e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.
 - (f) ~~If for reasons beyond its control, the Permittee fails to perform the monitoring and record keeping as required by Section D, then the reasons for this must be recorded.~~
 - (1) ~~At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides such failure providing adequate justification is documented and documents that such failures do not exceed five percent (5%) of the operating time in any quarter.~~
 - (2) Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.
- (11) In Condition C.19 (Actions Related to Noncompliance Demonstrated by a Stack Test) "corrective actions" has been changed to "response actions" to be consistent with the rest of the permit.

C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate ~~corrective~~ **response** actions. The Permittee shall submit a description of these ~~corrective~~ **response** actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the ~~corrective~~ **response** actions are being implemented.
- (12) In Condition C.20 (Emission Statement) the word "estimated" was added to Subsections (a)(1) and (a)(2) in order to be consistent with the language in 326 IAC 2-6.

C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
[326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate **estimated** actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
- (2) Indicate **estimated** actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (13) In Condition C.21 (General Record Keeping Requirements) the word "monitoring" was removed from Subsection (a) in order to clarify that the condition applies to all record keeping. The word "reports" was added to clarify that the source must keep copies of reports. Subsections (b) and (c) have been removed because they are unnecessary.

C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required ~~monitoring~~ data, **reports** and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or IDEM Northwest Regional Office makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or IDEM Northwest Regional Office within a reasonable time.
- ~~(b) Records of required monitoring information shall include, where applicable:~~
- ~~(1) The date, place, and time of sampling or measurements;~~
- ~~(2) The dates analyses were performed;~~
- ~~(3) The company or entity performing the analyses;~~
- ~~(4) The analytic techniques or methods used;~~

~~(5) The results of such analyses; and~~

~~(6) The operating conditions existing at the time of sampling or measurement.~~

~~(c) Support information shall include, where applicable:~~

~~(1) Copies of all reports required by this permit;~~

~~(2) All original strip chart recordings for continuous monitoring instrumentation;~~

~~(3) All calibration and maintenance records;~~

~~(4) Records of preventive maintenance.~~

~~(d)~~**(b)** Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

- (14) In Condition C.22 (General Reporting Requirements) Subsection (d) now states that the reports do need to be certified by the responsible official. This change is also reflected in all the D sections and the reporting forms. EPA has also requested this change.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The reports do ~~not~~ require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Sections D

- (1) The following statement has been added to the compliance monitoring conditions in the various D sections of the permit. The affected Conditions are D.2.5 (Visible Emissions Notations), D.2.6 (Parametric Monitoring), D.4.5 (Visible Emissions Notations), D.4.7 (Cyclone Failure Detection), D.5.7 (Visible Emissions Notations), D.5.8 (Parametric Monitoring), D.6.6 (Visible Emissions Notations), D.6.8 (Cyclone Failure Detection), D.7.5 (Visible Emissions Notations), D.7.6 (Parametric Monitoring), D.9.5 (Visible Emissions Notations), D.9.6 (Parametric Monitoring), D.13.4 (Visible Emissions Notations), and D.13.6 (Cyclone Failure Detection).

Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Changes throughout the Permit

- (1) The Office of Air Management (OAM) has changed its name to the Office of Air Quality (OAQ). This change has been made throughout the permit.

ASF-Keystone, Inc.
East Chicago, Indiana
Permit Reviewer: Nisha Sizemore

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T089-5973-00302

**Indiana Department of Environmental Management
Office of Air Management
and IDEM Northwest Office
and East Chicago Local Agency**

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: American Steel Foundries
Source Location: 3761 Canal Street, East Chicago, Indiana 46312
County: Lake
SIC Code: 3325
Operation Permit No.: T089-5973-00302
Permit Reviewer: Nisha Sizemore

The Office of Air Management (OAM) has reviewed a Part 70 permit application from American Steel Foundries relating to the operation of a steel foundry.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (1) one (1) scrap and charge handling process for two (2) electric arc furnaces, constructed in 1943, with a maximum charging capacity of 22.7 tons of metal per hour, with emissions uncontrolled and exhausting directly to the atmosphere;
- (2) one (1) electric arc furnace identified as unit 18-A-001, constructed in 1943, with a maximum melt capacity of 4.865 tons of metals per hour and a maximum charging capacity of 11.35 tons of metals per hour, using a baghouse as control, identified as unit 42-A-001, and exhausting to stack ID001;
- (3) one (1) electric arc furnace identified as unit 18-A-002, constructed in 1943, with a maximum melt capacity of 4.865 tons of metals per hour and a maximum charging capacity of 11.35 tons of metals per hour, using a baghouse as control, identified as unit 42-A-002, and exhausting to stack ID002;
- (4) one (1) pouring and casting process, identified as unit 08-L-015, constructed in 1943, with a maximum capacity of 9.73 tons of metal per hour, with emissions uncontrolled;
- (5) one (1) castings cooling process, constructed in 1943, also identified as unit 08-L-015, with a maximum capacity of 9.73 tons of metal per hour, with emissions uncontrolled;
- (6) one (1) sand reclaim system, identified as unit 33-B-RXX, constructed in 1960, with a maximum capacity of 15 tons of sand per hour, consisting of the following facilities:

- (a) one (1) rotary dryer kiln, constructed in 1960, to remove and destroy residual binders and binder decomposition product adhering to the zircon sand, with a maximum heat input capacity of 10.8 million Btu per hour, with emissions controlled by a cyclone, identified as 33-B-R10, and exhausting through stack ID003; and
 - (b) one (1) cooler constructed in 1960, with emissions controlled by a cyclone, identified as 33-B-R11, and exhausting through stack ID003;
- (7) one (1) castings shakeout system, identified as unit 33-B-SXX, constructed in 1979, with a maximum capacity of 250 tons of sand per hour, with emissions controlled by a cyclone and a dust collector identified as unit 47-B-001, and exhausting through stack ID006;
- (8) one (1) sand mixing system, identified as 33-B-MXX, with a maximum capacity of 15 tons of sand per hour, consisting of the following facilities:
 - (a) one (1) sand heater designated as 33-B-027, constructed in 1990 to warm the zircon sand prior to mixing the resins and additives, with a maximum heat input capacity of 0.60 million Btu per hour, with emissions uncontrolled and exhausting inside the building;
 - (b) a screening process with three (3) screens controlled by a cyclone identified as 33-B-M12, with emissions exhausting through stack ID008;
 - (c) one (1) sand mixer, designated as the West mixer, constructed in 1960, controlled by a cyclone identified as 33-B-M13, with emissions exhausting through stack ID008;
 - (d) one (1) sand mixer, designated as the East mixer, constructed in 1960, controlled by cyclone 33-B-M14, with emissions exhausting through stack ID008;
- (9) one (1) North sand reclaim system, identified as unit 33-B-XXX, constructed in 1981, with a maximum capacity of 150 tons of sand per hour, with emissions controlled by a dust collector identified as 47-B-003, and exhausting through stack ID012. This system includes the following equipment:
 - (a) two (2) skip hoists;
 - (b) sand feeders;
 - (c) sand conveyor;
 - (d) magnetic separator;
 - (e) crusher;
 - (f) crushed sand conveyor;
 - (g) elevator;
 - (h) 150 ton bin conveyor belt; and
 - (i) 150 ton bin.
- (10) one (1) surface coating booth, identified as 15-N-001, constructed in 1991, for coating a

maximum of 20 fifth wheels (for tractor trailer semi-trucks) per hour, utilizing air atomization spraying, with dry filters for overspray control, with emissions exhausting through stack ID013;

- (11) one (1) surface coating booth, identified as 11-D-006, constructed in 1992, for coating a maximum of 55 steel railcar parts per hour, utilizing air atomization spraying, with dry filters for overspray control, with emissions exhausting through stack ID014;
- (12) one (1) #3 Wheelabrator Tumbblast shotblast machine, identified as 35-D-021, constructed in 1957, with a maximum capacity of 5 tons of steel castings per hour, controlled by a baghouse identified as 49-D-006, with emissions exhausting through stack ID004;
- (13) one (1) #2 Wheelabrator Tumbblast shotblast machine, identified as 35-D-023, constructed in 1975, with a maximum capacity of 5 tons per hour, controlled by a baghouse, identified as 49-D-004, with emissions exhausting through stack ID005; and
- (14) one (1) woodworking process, identified as B & E Carpenter Shop 22-H-XXX, with emissions controlled by a cyclone, with particulate matter emissions after controls less than 5 pounds per hour and 15 pounds per day.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

- (1) fifteen (15) stick welding stations, identified as unit 16-D-XXX, constructed in 1994, with a maximum capacity of 578 electrodes per hour, with emissions uncontrolled and exhausting inside the building; and
- (2) carbon arc washing which consists of the use of carbon arc electrodes to burn ("wash") excess metal off steel castings, constructed in 1994, identified as 16-D-ZZZ, with a maximum capacity of 17.5 pounds of carbon arc electrodes per hour, with emissions uncontrolled and exhausting inside the building;

Emission Units and Pollution Control Equipment

There are no new facilities to be reviewed.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour including but not limited to the following units:
 - (a) two (2) boilers for quench system, constructed in 1989, each with a maximum heat input capacity of 0.25 million British thermal units per hour;
 - (b) two (2) resin heater boilers, constructed in 1985, each with a maximum heat input capacity of 0.116 million British thermal units per hour;
 - (c) one (1) Personnel boiler, constructed in 1988, with a maximum heat input capacity of 2.512 million British thermal units per hour;

- (d) four (4) ladle preheaters, constructed in 1950, each with a maximum heat input capacity of 1.2 million British thermal units per hour with emissions uncontrolled and exhausting to stack ID019;
- (e) five (5) heat treat / annealing furnaces, each with a maximum heat input capacity of 6.0 million British thermal units per hour with emissions uncontrolled and exhausting to stack ID016;
- (f) three (3) small tempering furnaces, each with a maximum heat input capacity of 0.6 million British thermal units per hour with emissions uncontrolled and exhausting to stack ID016;
- (g) two (2) car type tempering furnaces, each with a maximum heat input capacity of 4.3 million British thermal units per hour with emissions uncontrolled and exhausting to stack ID016;
- (h) two (2) heated quench tanks, with heaters rated at 0.299 million Btu per hour each;
- (i) four (4) natural gas fired core curing ovens, identified as 04-C-XXX, constructed in 1979, each with a maximum heat input capacity of 0.8 million British thermal units per hour, with emissions uncontrolled and exhausting to stack ID015;
- (j) two (2) large molding machines, constructed prior to 1979, each with a maximum heat input capacity of 1.85 million British thermal units per hour, with emissions uncontrolled and exhausting to stack ID017;
- (k) four (4) medium molding machines, constructed prior to 1979, each with a maximum heat input capacity of 0.988 million British thermal units per hour, with emissions uncontrolled and exhausting to stack ID017;
- (l) four (4) small molding machines, constructed prior to 1979, each with a maximum heat input capacity of 0.5 million British thermal units per hour, with emissions uncontrolled and exhausting to stack ID017;
- (m) nine (9) Shalco core making machines, constructed prior to 1979, each with a maximum heat input capacity of 0.4 million British thermal units per hour, with emissions uncontrolled and exhausting to stack ID018;
- (n) eight (8) 200 Dependable core making machines, constructed prior to 1979, each with a maximum heat input capacity of 0.2 million British thermal units per hour, with emissions uncontrolled and exhausting to stack ID018;
- (o) four (4) 100 Dependable core making machines, constructed prior to 1979, each with a maximum heat input capacity of 0.126 million British thermal units per hour, with emissions uncontrolled and exhausting to stack ID018;
- (p) one (1) Shalco Demmler core making machine, constructed prior to 1979, with a maximum heat input capacity of 0.3 million British thermal units per hour, with emissions uncontrolled and exhausting to stack ID018;
- (q) one (1) Demmler 315 core making machine, constructed prior to 1979, with a maximum heat input capacity of 0.16 million British thermal units per hour, with emissions uncontrolled and exhausting to stack ID018;

- (r) 110 natural gas-fired area heaters or "salamanders" for heating the foundry area, each rated at 10,000 Btu per hour, for a total load of 1.1 million Btu per hour maximum heat input capacity;
 - (s) comfort heaters, with a total load of 4.55 million Btu per hour maximum heat input capacity;
 - (t) one (1) resin storage tank heater rated at 0.255 million Btu per hour;
 - (u) one (1) paint drying booth rated at 1.2 million Btu per hour;
 - (v) one stopper rod oven rated at 0.25 million Btu per hour.
- (2) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
 - (3) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
 - (4) Refractory storage not requiring air pollution control equipment.
 - (5) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.
 - (6) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 20-6.
 - (7) Closed loop heating and cooling systems.
 - (8) Quenching operations used with heat treating processes.
 - (9) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
 - (10) Paved and unpaved roads and parking lots with public access.
 - (11) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
 - (12) Diesel emergency generators not exceeding 1600 horsepower.
 - (13) Stationary fire pumps.
 - (14) Grinding and machining operations uncontrolled, with particulate matter emissions less than 5 pounds per hour and 15 pounds per day.
 - (15) The use of ladle mortar on electric arc furnace roof and doors.
 - (16) slag storage stockpiles, with a maximum storage capacity of 100 cubic yards.
 - (17) Glue and solvent usage in maintenance activities.

- (18) Painting of small parts in dip tank.
- (19) one (1) woodworking process, identified as Pattern Shop 15-K-XXX, with emissions controlled by a cyclone and a Dust Collector baghouse, with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (1) OP 45-05-93-0483, issued on January 19, 1990.
- (2) OP 45-05-93-0484, issued on January 19, 1990.
- (3) OP 45-05-93-0485, issued on January 19, 1990.
- (4) OP 45-05-93-0486, issued on January 19, 1990.
- (5) OP 45-05-93-0487, issued on January 19, 1990.
- (6) OP 45-05-93-0488, issued on January 19, 1990.
- (7) OP 45-05-93-0489, issued on January 19, 1990.
- (8) OP 45-05-93-0490, issued on January 19, 1990.
- (9) OP 45-05-93-0491, issued on January 19, 1990.
- (10) OP 45-05-93-0492, issued on January 19, 1990.
- (11) OP 45-05-93-0493, issued on January 19, 1990.
- (12) OP 45-05-93-0494, issued on January 19, 1990.
- (13) OP 45-05-93-0495, issued on January 19, 1990.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

- (a) OP 45-05-93-0485, issued on January 19, 1990

Condition: In accordance with 326 IAC 6-1-10.1, the sand kiln and cooler are limited to 28.0 pounds per hour particulate matter emissions.

Reason not incorporated: 326 IAC 6-1-10.1 limits PM10 emissions from the sand kiln and cooler to 0.636 pound per ton of sand and 16.29 pounds per hour.

- (b) OP 45-05-93-0489, issued on January 19, 1990

Condition: In accordance with 326 IAC 6-1-10.1, the sand mixing system (consisting of the sand heater and two mixers) is limited to 20.0 pounds per hour particulate matter emissions.

Reason not incorporated: 326 IAC 6-1-10.1 limits PM10 emissions from the sand mixing system (consisting of the sand heater and two mixers) to 0.520 pound per ton of sand and 11.44 pounds per hour.

Air Pollution Control Justification as an Integral Part of the Process

The company has submitted the following justification such that the baghouses be considered as an integral part of the Wheelabrator Tumblast shotblast machines #2 and #3:

The baghouse is used such that 40% of the shot material is recycled and reused.

Evaluation

One of the following three criteria must be satisfied in order for the pollution control equipment to be considered as an integral part of the operation:

- (1) The process cannot operate without the control equipment.

The control equipment must be necessary to the actual process. The applicant must show that the process itself could not function without the control equipment.

The applicant has not shown that the shotblasters physically cannot operate without the baghouses operating.

- (2) The control equipment serves a primary purpose other than pollution control.

The control equipment's primary purpose must be something other than pollution control. The control equipment will have to serve as a fundamental component in another process or operation.

The applicant has not shown that the baghouses serve any primary purpose other than pollution control.

- (3) The control equipment has an overwhelming positive net economic effect.

Control equipment, such as a product recovery device, whose total cost of installation and maintenance is far less than the net savings that the source enjoys from recovering otherwise lost product. From a quantity standpoint, the captured material must also make up 85% or more of the product produced, or 85% or more of the raw material used in the process.

The source has shown that the amount of raw material recovered from the use of the baghouses is only 40%.

IDEM, OAM has evaluated the justifications and determined that the baghouses will not be considered as an integral part of the Wheelabrator Tumblast shotblast machines #2 and #3. Therefore, the permitting level will be determined using the potential to emit before the baghouses.

Enforcement Issue

- (a) IDEM is aware that the following equipment has been constructed and operated prior to receipt of the proper permit:

- (1) fifteen (15) stick welding stations, identified as unit 16-D-XXX, constructed in 1994, with a maximum capacity of 578 E11018M electrodes per hour, with emissions uncontrolled and exhausting through stack ID022;
 - (2) carbon arc washing which consists of the use of carbon arc electrodes to burn ("wash") excess metal off steel castings, identified as 16-D-ZZZ, constructed in 1994, with a maximum capacity of 17.5 pounds of carbon arc electrodes per hour, with emissions uncontrolled and exhausting through stack ID023;
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on May 31, 1996. Additional information was received on March 16, 1999.

A notice of completeness letter was mailed to the source on February 19, 1997.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential Emissions (tons/year)
PM	greater than 100
PM-10	greater than 100
SO ₂	less than 100
VOC	greater than 25
CO	greater than 100
NO _x	greater than 25

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
glycol ethers	greater than 10
methyl ethyl ketone	less than 10

lead	less than 10
arsenic	less than 10
cadmium	less than 10
chromium	less than 10
manganese	less than 10
methanol	greater than 10
TOTAL	greater than 25

- (a) The potential emissions (as defined in the Indiana Rule) of PM₁₀ and CO are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential emissions (as defined in the Indiana Rule) of VOC and NO_x are equal to or greater than 25 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) The potential emissions (as defined in Indiana Rule) of any single HAP is equal to or greater than ten (10) tons per year and the potential emissions (as defined in Indiana Rule) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects 1998 emission data.

Pollutant	Actual Emissions (tons/year)
PM	49.7
PM-10	28.5
SO ₂	4.96
VOC	334
CO	41.0
NO _x	70.4

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
scrap and charge handling (1943)	25.57	15.34	--	--	--	--	--
electric arc furnace #1 (1943)	2.22	2.22	--	--	--	--	--
electric arc furnace #2 (1943)	2.22	2.22	--	--	--	--	--
pouring/casting (1943)	119.3	119.3	--	--	--	--	--
castings cooling (1943)	59.66	59.66	--	--	--	--	--
#3 Tumblast (1957)	2.97	2.97	--	--	--	--	--
sand mixers (1960)	34.2	34.2	--	--	--	--	--
sand kiln and cooler (1960)	41.7	41.7	--	--	--	--	--
#2 Tumblast (1975)	2.97	2.97	--	--	--	--	--
shakeout system (1979)	24	0.51	--	39	--	--	--
north sand reclaim system (1981)	24	28.4	--	--	--	--	--
sand heater (1990)	9.84	9.84	--	--	--	--	--
Fifth wheel surface coating booth (1991)	7.32	7.32	--	14.74	--	--	--
C & F surface coating booth (1992)	9.01	9.01	--	9.57	--	--	--
stick welding and carbon arc washing (1994)	23.4	14	--	--	--	--	--
Total Emissions	388.38	339.66	--	63.31	--	--	--

County Attainment Status

The source is located in Lake County.

Pollutant	Status
PM-10	moderate nonattainment
SO ₂	primary nonattainment
NO ₂	severe nonattainment
Ozone	severe nonattainment
CO	nonattainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Lake County has been designated as severe nonattainment for ozone.

Federal Rule Applicability

- (a) There are no New Source Performance Standards, 326 IAC 12, (40 CFR Parts 60) applicable to this source.

The electric arc furnaces #1 and #2 are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.270, Subpart AA), because they were constructed in 1943, which is prior to applicability date (October 21, 1974) of this rule. There have been no modifications to the furnaces since the applicability date of this rule.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Parts 61 or 63) applicable to this source.

The parts washing station is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart T, because the solvent used does not contain any of the following halogenated solvents in concentrations greater than five percent by weight: methylene chloride, 1,1,1-trichloroethane, trichloroethylene, perchloroethylene, carbon tetrachloride, or chloroform.

State Rule Applicability - Entire Source

326 IAC 1-5-2 (Emergency Reduction Plans)

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

Northwest Regional Office

NBD Bank Building, Suite 418
504 North Broadway
Gary, Indiana 46402-1921

and

East Chicago Local Agency
4522 Indianapolis Blvd.
East Chicago, IN 46312

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, and the IDEM Northwest Office, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, and the IDEM Northwest Office, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 2-3 (Emission Offsets)

This source is a major PSD source because it is one of the 28 listed source categories (secondary metal production), and has the potential to emit at least one criteria pollutant in amounts greater than 100 tons per year. This source has never been reviewed under the requirements of PSD. This source is also a major source under Emission Offset rules because it is located in a County which is nonattainment for PM10 and severe nonattainment for ozone and it has the potential to emit PM10 and VOC in amounts greater than 100 and 25 tons per year respectively. This source has never been reviewed under the requirements of Emission Offsets.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Lake County and has the potential to emit more than ten (10) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 4-1 (Open Burning)

Pursuant to 326 IAC 4-1 (Open Burning), open burning is prohibited except as allowed in this rule.

326 IAC 5-1 (Opacity)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-1-10.1 (Lake County PM₁₀ Emission Requirements)

Pursuant to 326 IAC 6-1-10.1, the Permittee shall implement the maintenance and inspection practices outlined in the approved Continuous Compliance Plan.

326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements)

Pursuant to 326 IAC 6-1-11.1 (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).
- (c) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
- (i) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
- (j) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (k) Any facility or operation not specified in 326 IAC 6-1-11.1(d) shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the approved Fugitive Dust Control Plan. A copy of this plan is included in the permit as Attachment A.

326 IAC 6-1-11.2 (Lake County Particulate Matter Contingency Measures)

The source is subject to this rule because it is subject to the requirements of 326 IAC 6-1-11.1. Pursuant to this rule, the source shall comply with parts (k), (l), (m), (o), (p), and (q) of this rule.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 8-7 (Specific VOC emission reduction requirements for Lake, Porter, Clark, and Floyd Counties)

The requirements of 326 IAC 8-7 (Specific VOC emission reduction requirements for Lake, Porter, Clark, and Floyd Counties) are not applicable to this source, because the potential to emit VOC from the source (excluding exempted facilities as listed in the rule) is less than 25 tons per year. A summary of the applicability determination is shown in the following table:

Unit Description	Potential to Emit VOC ⁵ (tons/year)	Include in Applicability Determination	Notes
volatile storage tanks	1	no	exempt per 326 IAC 8-7-2(a)(3)(Q), volatile organic liquid storage facilities
paint booths	24.31	no	paint booths are subject to 326 IAC 8-2-9; therefore are exempt per 326 IAC 8-7-2(a)(3)(A)
sand mixers ¹	743.1	no	exempt per 326 IAC 8-7-2(a)(3)(H), Batch Processors
mold machines ²	3.22	no	exempt per 326 IAC 8-7-2(a)(3)(H), Batch Processors
core machines ²	1.40	no	exempt per 326 IAC 8-7-2(a)(3)(H), Batch Processors
electric arc furnaces ³	14.92	no	exempt per 326 IAC 8-7-2(a)(3)(H), Batch Processors
pouring/cooling /shakeout ⁴	49	no	exempt per 326 IAC 8-7-2(a)(3)(H), Batch Processors
core curing ovens	1.40	yes	as per 326 IAC 8-7-2(2)(A)
combustion sources	2.59	yes	as per 326 IAC 8-7-2(2)(A)
Total for all units included in applicability determination	3.99		

Notes:

- (15) There are two sand mixers at the plant. Sand and resin is added separately into a mixer, and the mixer is closed. The materials are mixed over approximately 5 minutes. The mixers then dump the mix into buckets, and the cycle is repeated. Since the mixers operate as batch processors, the emissions from the mixers do not count toward the applicability determination of 326 IAC 8-7.
- (16) The core and mold machines operate essentially the same and use the same raw materials. The sand/resin mixture is injected into the mold/core machine. Heat is applied to the mixture to "set" the mold/core. After the mixture is "set", the mold/core is removed from the machine. The cycle

time for the machine is approximately 5 minutes. Since the core and mold machines operate as batch processors, the emissions from the core and mold machines do not count toward the applicability determination of 326 IAC 8-7.

- (17) The two electric arc furnaces (EAFs) are large vessels, which are loaded with steel scrap, closed, and an electric arc is applied to melt the steel. The melting process occurs over a 120-minute cycle. Once the metal is melted it is transferred to ladles for pouring. Since the EAFs operate as batch processors, the emissions from the EAFs do not count toward the applicability determination of 326 IAC 8-7.
- (18) The pouring/cooling/shakeout process for all of the products occurs on the pouring floor. The molds are poured and cool in place. Molds which are poured in "boxes" cool over a 24-hour period. The "fifth-wheel" molds cool over a 5-hour period. The shakeout process for fifth-wheels is a continuation of the pouring and cooling process. The sand from the molds and cores falls off of the parts as the parts are picked up by fork trucks. This is essentially a continuation of the pouring and cooling batch process. Other parts go through a separate shakeout process, where the molds are set on a shaker as a batch, the materials are shaken to separate the mold and core materials from the metal parts, and the parts are removed from the shaker. The cycle time for this process is approximately 15 minutes. Since the pouring/cooling/shakeout processes operate as batch processors, the emissions from the pouring/cooling/shakeout do not count toward the applicability determination of 326 IAC 8-7.
- (19) Detailed calculations are shown in Appendix A.

State Rule Applicability - Two (2) Electric Arc Furnaces - constructed in 1943

326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements)

Pursuant to this rule, the combined PM10 emissions from both of the electric arc furnaces #1 and #2 shall not exceed 0.104 pounds per ton of product and 1.248 pounds per hour.

Note: Since calculations show that the furnaces may not comply with the limits, a stack test will be required to demonstrate compliance.

State Rule Applicability - Pouring/Casting Process - constructed in 1943

326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations)

Pursuant to this rule, the particulate matter (PM) emissions from the pouring/casting process shall be limited to 0.03 grain per dry standard cubic foot.

State Rule Applicability - Castings Cooling Process - constructed in 1943

326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations)

Pursuant to this rule, the particulate matter (PM) emissions from the castings cooling process shall be limited to 0.03 grain per dry standard cubic foot.

State Rule Applicability - sand reclaim system consisting of a rotary dryer kiln and cooler - constructed in 1960

326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements)

Pursuant to this rule, the combined PM10 emissions from both the sand kiln and cooler shall not exceed 0.636 pounds per ton of product output from the kiln/cooler and 16.29 pounds per hour total

from both units combined.

State Rule Applicability - Castings Shakeout - constructed in 1979

326 IAC 2-3 (Emission Offset Minor Source Limits)

VOC Emissions:

In 1979, when this castings shakeout operation was constructed, this source was already a major source and Lake County was designated as nonattainment for ozone. The different classifications of nonattainment (e.g. moderate, severe, etc.) were not used until 1990; therefore the applicability threshold for this rule was 40 tons per year when this facility was constructed. The existing permit for the shakeout system does not include a VOC limit. However, since potential VOC emissions from shakeout are greater than 40 tons per year; a limit is necessary to render the requirements of 326 IAC 2-3 not applicable. Therefore, the VOC emissions from the shakeout process shall not exceed 8.90 pounds per hour (39 tons per year). The source plans to demonstrate compliance with this limit by showing that the emission factor used to calculate the potential emissions (1.20 lbs/ton) is too high. In order to meet a limit of 8.90 pounds per hour, the emission factor would need to be no higher than 0.92 pounds of VOC per ton of steel. A stack test will be required to demonstrate that this "alternate emission factor" is appropriate for this facility.

Particulate matter emissions:

In 1979, when this castings shakeout operation was constructed, this source was already a major source and Lake County was designated as nonattainment for TSP. The existing permit for the shakeout system does not include a PM limit. However, since potential PM emissions from shakeout are greater than 25 tons per year; a limit is necessary to render the requirements of 326 IAC 2-3 not applicable. Therefore, the PM emissions from the shakeout process shall not exceed 5.48 pounds per hour (24 tons per year). This is equivalent to 0.563 pounds per ton of steel.

Particulate matter less than ten microns (PM10) emissions:

PM10 was not a regulated pollutant until 1989. Since this facility was constructed prior to 1989, a PM10 limit is not necessary to render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements)

Pursuant to this rule, the PM10 emissions from the shakeout dust collector identified as 47-B-003 shall not exceed 0.012 pound per ton of product and 0.384 pound per hour.

Note: Since calculations show that the facility may not comply with the limit, a stack test will be required to demonstrate compliance.

State Rule Applicability - Sand Mixing System consisting of a Sand Heater (constructed in 1990), a screening process, and Two Sand Mixers (constructed in 1960)

326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements)

Pursuant to this rule, the PM10 emissions from both of the sand mixers combined shall not exceed 0.520 pounds per ton of product output from the mixers and 11.44 pounds per hour.

326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations)

Pursuant to this rule, the particulate matter (PM) emissions from the screening process shall be limited to 0.03 grain per dry standard cubic foot.

326 IAC 6-1-2(b)(5)(Nonattainment Area Particulate Limitations)

Pursuant to this rule, the particulate matter (PM) emissions from the sand heater shall be limited to

0.01 grain per dry standard cubic foot.

State Rule Applicability - North Sand Reclaim System - constructed in 1981

326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations)

Pursuant to this rule, the particulate matter (PM) emissions from the north sand reclaim system shall be limited to 0.03 grain per dry standard cubic foot. This is equivalent to 6.48 pounds per hour (28.4 tons per year).

326 IAC 2-3 (Emission Offset Minor Source Limits)

Particulate matter emissions:

In 1981, when this sand reclaim system was constructed, this source was already a major source and Lake County was designated as nonattainment for TSP. The applicability level for PM emissions for this rule is 25 tons per year. Since potential PM emissions from the sand reclaim system are greater than 25 tons per year; a limit is necessary to render the requirements of 326 IAC 2-3 not applicable. Therefore, the PM emissions from the sand reclaim system shall not exceed 5.48 pounds per hour (24 tons per year). This is equivalent to 0.037 pound per ton of steel.

Particulate matter less than ten microns (PM10) emissions:

PM10 was not a regulated pollutant until 1989. Since this facility was constructed prior to 1989, a PM10 limit is not necessary to render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

State Rule Applicability - Fifth Wheel Surface Coating Booth (15-N-001) - constructed in 1991

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The Fifth wheel surface coating booth, identified as booth 15-N-001 is subject to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) because it is located at a source in Lake County and has actual emissions greater than 15 pounds per day. Pursuant to this rule, the following conditions shall apply:

- (a) The volatile organic compound (VOC) content of coating delivered to the applicator at the spray booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water.
- (b) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the spray booth is in compliance with this requirement.

326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations)

Pursuant to this rule, the particulate matter (PM) overspray from the Fifth Wheel surface coating booth identified as booth 15-N-001, shall be limited to 0.03 grain per dry standard cubic foot of exhaust. This is equivalent to 1.67 pounds per hour. Compliance with this limit will also render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

326 IAC 2-3 (Emission Offset Minor Source Limit)

In 1991, when this surface coating booth was constructed, this source was already a major source and Lake County was designated as severe nonattainment for ozone. This rule applies to all modifications having an VOC emission increase which is not de minimis to an existing major source. Therefore, it is necessary to show that the VOC increase resulting from the new surface coating booth was de minimis. De minimis, as defined by 326 IAC 2-3-1(j) means an increase that

does not exceed twenty-five (25) tons per year when the net emissions increases from the proposed modification are aggregated on a pollutant specific basis with all other net emissions increases from the source over a five (5) consecutive calendar year period prior to, and including, the year of the modification.

The following table shows the VOC emissions increases due to modifications at this source during the five-year period prior to and including 1991.

Facility	Date of Construction	VOC (tons/year)
Personnel boiler	1988	0.06
two (2) boilers for quench system	1989	0.01
sand heater	1990	0.02
Fifth wheel surface coating booth	1991	14.74
Totals		14.83
Offset de minimis level		25

VOC emissions increases over the past 5 years are less than the de minimis levels of 25 tons per year, therefore, 326 IAC 2-3 (Emission Offset) does not apply to the Fifth Wheel surface coating booth.

State Rule Applicability - C & F Surface Coating Booth (11-D-006) - constructed in 1992

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The C & F surface coating booth, identified as booth 11-D-006, is subject to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating) because it is located at a source in Lake County and has actual emissions greater than 15 pounds per day. Pursuant to this rule, the following conditions shall apply:

- (a) The volatile organic compound (VOC) content of coating delivered to the applicator at the spray booth shall be limited to 3.5 pounds of VOCs per gallon of coating less water.
- (b) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Based on the MSDS submitted by the source and calculations made, the spray booth is in compliance with this requirement.

326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations)

Pursuant to this rule, the particulate matter (PM) overspray from the C & F surface coating booth identified as booth 11-D-006, shall be limited to 0.03 grain per dry standard cubic foot of exhaust. This is equivalent to 2.06 pounds per hour. Compliance with this limit will also render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

326 IAC 2-3 (Emission Offset Minor Source Limit)

In 1992, when this surface coating booth was constructed, this source was already a major source and Lake County was designated as severe nonattainment for ozone. This rule applies to all modifications having an VOC emission increase which is not de minimis to an existing major source. Therefore, it is necessary to show that the VOC increase resulting from the new surface coating booth was de minimis. De minimis, as defined by 326 IAC 2-3-1(j) means an increase that does not exceed twenty-five (25) tons per year when the net emissions increases from the proposed modification are aggregated on a pollutant specific basis with all other net emissions increases from the source over a five (5) consecutive calendar year period prior to, and including, the year of the modification.

The following table shows the VOC emissions increases due to modifications at this source during the five-year period prior to and including 1992.

Facility	Date of Construction	VOC (tons/year)
Personnel boiler	1988	0.06
two (2) boilers for quench system	1989	0.01
sand heater	1990	0.02
Fifth wheel surface coating booth	1991	14.74
C & F surface coating booth	1992	18.06
Totals		32.89
Offset de minimis level		25

Using the potential VOC emissions from the new C & F surface coating booth, VOC emissions increases over the past 5 years are greater than the de minimis levels of 25 tons per year. Therefore a limit is required to render 326 IAC 2-3 (Emission Offset) not applicable to the C & F surface coating booth. The C & F surface coating booth was permitted by Operation permit 45-05-93-0493 issued January 19, 1990, but the permit did not include a limit to render 326 IAC 2-3 not applicable. A combined VOC limit of 24.31 tons per year for both surface coating booths will be included in the Part 70 permit. Using a combined VOC limit of 24.31 tons per year for both of the surface coating booths will result in total VOC emissions over the 5 year period being 24.4 tons per year, which is considered de minimis. Therefore the requirements of 326 IAC 2-3 (Emission Offset) will not apply.

State Rule Applicability - #2 Wheelabrator Tumblast Shotblast Machine - constructed in 1975

326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements)

Pursuant to this rule, the PM10 emissions from the #2 Tumblast with dust collector shall not exceed 0.145 pound per ton of product and 0.678 pound per hour.

State Rule Applicability - #3 Wheelabrator Tumblast Shotblast Machine - constructed in 1957

326 IAC 6-1-10.1 (Lake County PM10 Emission Requirements)

Pursuant to this rule, the PM10 emissions from the #3 Tumblast with dust collector shall not exceed 0.145 pound per ton of product and 0.678 pound per hour.

**State Rule Applicability - Welding Operations - constructed in 1994
Carbon Arc Washing - constructed in 1994**

326 IAC 6-1-2(a) (Nonattainment Area Particulate Limitations)

- (a) Pursuant to this rule, the particulate matter (PM) emissions from the welding operations shall be limited to 0.03 grain per dry standard cubic foot. This is equivalent to 2.25 pounds per hour.
- (b) Pursuant to this rule, the particulate matter (PM) emissions from carbon arc washing shall be limited to 0.03 grain per dry standard cubic foot. This is equivalent to 3.09 pounds per hour.

326 IAC 2-3 (Emission Offset Minor Source Limits)

Particulate matter emissions:

In 1994, when this sand reclaim system was constructed, this source was already a major source and Lake County was designated as nonattainment for PM₁₀. The limits pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations) for the welding and carbon arc washing operations are equivalent to a total PM limit of 5.34 pounds per hour (23.36 tons per year). These limits are sufficient to limit PM to less than the applicability threshold for 326 IAC 2-3 (Emission Offset); however, these limits are not sufficient to limit PM₁₀ emissions to less than the applicability threshold for 326 IAC 2-3 (Emission Offset). Therefore, a combined limit of 3.20 pounds per hour of PM₁₀ emissions will be required for the welding and carbon arc washing operations. This limit will render the requirements of 326 IAC 2-3 (Emission Offset) not applicable.

Insignificant Activities

**State Rule Applicability - Natural Gas Fired Boilers including:
Two (2) boilers for quench system, constructed in 1989;
Two (2) resin heated boilers, constructed in 1985; and
One (1) Personnel boiler, constructed in 1988.**

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

Pursuant to 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations), the PM emissions from each of the boilers shall be limited to 0.01 grains per dry standard cubic foot of exhaust air.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The boilers are not subject to the requirements of this rule because they have the potential to emit less than 25 tons per year and 10 pounds per hour of sulfur dioxide.

State Rule Applicability - Coremaking Process, constructed prior to 1979

326 IAC 8-1-6 (BACT)

None of the core machines are subject to the requirements of this rule because each one has potential VOC emissions less than 25 tons per year and they were constructed prior to January 1, 1980.

State Rule Applicability - Mold Making Process

326 IAC 8-1-6 (BACT)

None of the mold machines are subject to the requirements of this rule because each one has potential VOC emissions less than 25 tons per year and they were constructed prior to January 1, 1980.

State Rule Applicability - Degreasing Operations

326 IAC 8-3-2 (Cold Cleaner Operations)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control),

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility, construction of which commenced after July 1, 1990, shall ensure that the following control equipment requirements are met:

- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
- (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

- (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990 shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

State Rule Applicability - Grinding and Machining Operations, Carpenter Shop, and Pattern Shop

326 IAC 6-1-2(a)(Nonattainment Area Particulate Limitations)

Pursuant to this rule, the particulate matter (PM) emissions from the grinding and machining operations, the carpenter shop, and the pattern shop shall each be limited to 0.03 grain per dry standard cubic foot.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The various processes at American Steel Foundries plant have applicable compliance monitoring conditions as specified below:

- (a) Visible emissions notations of the controlled stack exhausts of the significant emission units shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (b) The Permittee shall record the total static pressure drop across all of the baghouses controlling the significant emission units, at least once per shift when the associated processes are in operation. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 1.0 to 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.
- (c) An inspection shall be performed each calendar quarter of all bags controlling the foundry processes when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.
- (d) In the event that bag failure has been observed:
 - (1) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced.
 - (2) Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion
- (e) The Permittee shall maintain records of the results of the baghouse inspections.
- (f) The Permittee shall perform stack testing for the facilities and pollutants as shown in the following table using methods as approved by the Commissioner, in order to demonstrate compliance with the emission limits specified in this permit. All tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration, except for the tests on the electric arc furnaces, which shall be repeated at least once every 2.5 years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10.

Unit/Facility	Pollutants	Time Frame	Limits
electric arc furnaces #1 and #2	PM10	Within 12 months after permit issuance	0.104 lbs/ton and 1.248 lbs/hr (for both furnaces combined)
#2 and #3 Wheelabrator Tumblast units	PM10	Within 12 months after permit issuance	0.145 lbs/ton castings and 0.678 lbs/hour (for each shotblast machine)
sand kiln and cooler	PM10	Within 12 months after permit issuance	0.636 lbs/ton product output and 16.29 lbs/hr (limit for both units combined)
castings shakeout	PM10	Within 12 months after permit issuance	0.12 lbs/ton castings and 0.384 lbs/hr
	PM	Within 12 months after permit issuance	1.15 lbs/ton of castings and 11.2 lbs/hr
	VOC	Within 12 months after permit issuance	1.15 lbs/ton of castings and 11.2 lbs/hr
two sand mixers	PM10	Within 12 months after permit issuance	0.520 lbs/ton product output and 11.44 lbs/hr (combined limits for both units)
north sand reclaim system	PM	Within 12 months after permit issuance	0.03 gr/dscf

Notes:

Any stack which has multiple processes which exhaust to the same stack shall operate all of the processes simultaneously in accordance with 326 IAC 3-2.1 (Source Sampling Procedures). Stack tests shall be conducted when the process is operating at 95% of maximum capacity or greater.

- (g) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters used for overspray control for the surface coating booths. To monitor the performance of the dry filters, daily observations shall be made of the plenum behind the dry filters to while one or more of the booths are in operation, to determine if overspray has occurred. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of the permit.
- (h) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be

considered a violation of the permit.

- (i) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.
- (j) Records shall be kept of the amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents. A quarterly report of this information shall be submitted.
- (k) An inspection shall be performed each calendar quarter of all cyclones controlling the significant emission units when venting to the atmosphere. A cyclone inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors.
- (l) In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (m) There are no compliance monitoring requirements for the pouring and cooling operations because there are no controls associated with these processes and they have actual emissions below 25 tons per year.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations.

Conclusion

The operation of this steel foundry shall be subject to the conditions of the attached proposed Part 70 Permit No. T089-5973-00302.

Attachment A
(fugitive dust control plan)

Appendix A: Emission Calculations

Company Name: American Steel Foundries
 Plant Location: 3761 Canal Street, East Chicago, IN 46312
 County: Lake
 Permit Reviewer: Nisha Sizemore
 TV #: 089-5973
 Plt. ID #: 089-00302

* * Process Emissions * *

Process:	Rate (tons steel/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Scrap and Charge Handling	9.730	PM	0.60	25.57	25.57	none
		PM-10	0.36	15.34	15.34	none
SCC# 3-04-007-12		SO2	0.00	0.00	0.00	
AP-42 Ch. 12.13		NOx	0.00	0.00	0.00	
		VOC	0.00	0.00	0.00	
constructed in 1943		CO	0.00	0.00	0.00	
		Lead	0.00	0.00	0.00	

Process:	Rate (tons steel/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control
Melting	9.730	PM	13.00	554.03	20.94	baghouse 96.22% ID001
1 Electric Arc Furnace		PM-10	6.30	268.49	10.15	baghouse 96.22%
furnaces #1 and #2		SO2	0.24	10.23	10.23	
constructed in 1943		NOx	0.20	8.52	8.52	
EPA SCC# 3-04-007-01		VOC	0.35	14.92	14.92	
AP-42 Ch. 12.13		CO	18.00	767.11	767.11	
		Lead	0.00	0.00	0.00	

Allowable Emissions:

Limits pursuant to 326 IAC 6-1-10.1 (PM10 emission limits)

0.104 lbs/ton = 1.01 lbs/hr = 4.43 tons/yr (will not comply)

1.248 lbs/hr = 5.47 tons/yr (will not comply)

Since calculations show that the furnace may not comply with the limit(s), a stack test will be required to demonstrate compliance.

Process:	Rate (tons steel/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control (% eff.)
Pouring/Casting	9.730	PM	2.80	119.33	119.33	
SCC# 3-04-007-08		PM-10	2.80	119.33	119.33	
		SO2	0.02	0.85	0.85	
constructed in 1943		NOx	0.01	0.43	0.43	
		VOC	0.14	5.97	5.97	
		CO	---	0.00	0.00	
		Lead	---	0.00	0.00	

Process:	Rate (tons steel/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control (% eff.)
Castings Cooling	9.730	PM	1.40	59.66	59.66	none
SCC# 3-04-007-13		PM-10	1.40	59.66	59.66	none
		SO2	0.00	0.00	0.00	
constructed in 1943		NOx	0.00	0.00	0.00	
		VOC	0.00	0.00	0.00	
		CO	---	0.00	0.00	
		Lead	---	0.00	0.00	

Process:	Rate (tons steel/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control (% eff.)	
Castings Shakeout	9.730	PM	3.20	136.38	2.73	baghouse 1	98.0% ID006
		PM-10	2.62	111.66	2.23	baghouse 1	98.0%
SCC# 3-04-007-09		SO2	0.00	0.00	0.00		
AP-42 Ch. 12.13		NOx	0.00	0.00	0.00		
		VOC	1.20	51.14	51.14		
constructed in 1979		CO	---	0.00	0.00		
		Lead	---	0.00	0.00		

Allowable Emissions:

Limits pursuant to 326 IAC 6-1-10.1 (PM10 emission limits)

0.012 lbs/ton = 0.11676 lbs/hr = 0.51 tons/yr (will not comply)

0.384 lbs/hr = 1.68 tons/yr (will not comply)

Since calculations show that the facility may not comply with the limit(s), a stack test will be required to demonstrate compliance.

The above calculation shows that potential VOC emissions from the shakeout system are 51.14 tons per year.

The unit was constructed in 1979. In 1979, Lake County was designated as nonattainment for ozone; however, the different classifications of nonattainment (e.g. moderate, severe, etc.) were not developed until 1990.

Therefore, the emission level threshold was 40 tons per year.

The existing permit for the shakeout system did not include a limit for VOC emissions in order to render the requirements of 326 IAC 2-3 not applicable.

Since the calculations show that potential VOC emissions are greater than 40 tons per year, a limit is necessary in order to render the requirements of 326 IAC 2-3 (Emission Offsets) not applicable.

The limit is calculated as follows:

Process:	Rate (tons steel/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control (% eff.)	
Castings Shakeout	7.420	VOC	1.20	39.00	39.00		ID006

SCC# 3-04-007-09 A production limit of 65000.00 tons steel per year would be sufficient to limit
AP-42 Ch. 12.13 OR emissions to 49 tons per year.

	Rate (tons steel/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control (% eff.)
constructed in 1979	9.730	VOC	0.92	39.00	39.00	

An emission limit of 0.92 lbs VOC/ton would be sufficient to limit emissions to 49 tons per year.

Process:	Rate tons sand/hr	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control (% eff.)	
sand handling	150.000	PM	3.60	2365.20	2.37	baghouse	99.9% ID012
north sand reclaim system		PM-10	0.54	354.78	0.35	baghouse	99.9%
SCC# 3-04-007-09		SO2	0.00	0.00	0.00		
AP-42 Ch. 12.13		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		
constructed in 1981		CO	---	0.00	0.00		
		Lead	---	0.00	0.00		

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations):

$$\frac{0.03 \text{ gr/dscf} \times 25200 \text{ acfm} \times \frac{60 \text{ min/hr}}{7000 \text{ gr/lb}}}{1} = 6.48 \text{ lbs/hr} = 28.38 \text{ tons/yr (will comply)}$$

However, this limit is not sufficient to render the requirements of 326 IAC 2-3 (Emission Offsets) not applicable. Limits of 5.48 lbs/hr (24 tons per year) for PM and 3.20 lbs/hr (14 tons per year) for PM10 will be necessary.

Process:	Rate (tons steel/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control (% eff.)	
Castings Cleaning/Finishing	5.000	PM	17.00	372.30	3.72	baghouse	99.0% ID004
SCC# 3-04-007-11		PM-10	1.70	37.23	0.37	baghouse	99.0%
AP-42 Ch. 12.13		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
#3 Tumbleblast		VOC	0.00	0.00	0.00		
constructed in 1957		CO	0.00	0.00	0.00		
		Lead	---	0.00	0.00		

Allowable Emissions:

Limits pursuant to 326 IAC 6-1-10.1 (PM10 emission limits)

0.145 lbs/ton = 0.725 lbs/hr = 3.1755 tons/yr (will comply)

0.678 lbs/hr = 2.96964 tons/yr (will comply)

Process:	Rate (tons steel/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control (% eff.)	
Castings Cleaning/Finishing	5.000	PM	17.00	372.30	3.72	baghouse	99.0% ID005
SCC# 3-04-007-11		PM-10	1.70	37.23	0.37	baghouse	99.0%
AP-42 Ch. 12.13		SO2	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
#2 Tumbleblast		VOC	0.00	0.00	0.00		
constructed in 1975		CO	0.00	0.00	0.00		
		Lead	---	0.00	0.00		

Allowable Emissions:

Limits pursuant to 326 IAC 6-1-10.1 (PM10 emission limits)

0.145 lbs/ton = 0.725 lbs/hr = 3.1755 tons/yr (will comply)

0.678 lbs/hr = 2.96964 tons/yr (will comply)

Process	Rate (ton sand/hr)	Pollutant	Ef (lb/ton sand)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	
Sand Handling	15	PM	3.6	236.5	23.7	cyclones	90.00% ID008
EPA SCC# 3-04-007-06		PM-10	0.54	35.5	3.5	cyclones	90.00%
sand mixer system		VOC	11.31	743.1		none	
constructed in 1960							
VOC emission factor is from resin supplier							

Allowable Emissions:

Limits pursuant to 326 IAC 6-1-10.1 (PM10 emission limits)

$$0.520 \text{ lbs/ton} = 7.8 \text{ lbs/hr} = 34.164 \text{ tons/yr} \quad (\text{will comply})$$

$$11.440 \text{ lbs/hr} = 50.1072 \text{ tons/yr} \quad (\text{will comply})$$

Process	Heat input (MMBtu/hr)	Pollutant	Ef (lb/MMCF)	Ebc (ton/yr)
Sand Heater	0.6	PM	11.2	0.03
		PM-10	11.2	0.03
constructed in 1990		SO2	0.6	0.00
		NOx	94	0.25
		VOC	7.3	0.02
		CO	40	0.11

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations):

$$\frac{0.03 \text{ gr/dscf} \times 8740 \text{ acfm} \times \frac{60 \text{ min/hr}}{7000 \text{ gr/lb}}}{1} = 2.25 \text{ lbs/hr} = 9.84 \text{ tons/yr} \quad (\text{will comply})$$

Process	Rate (ton sand/hr)	Pollutant	Ef (lb/ton sand)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	
Sand Handling	15	PM	3.6	236.5	23.7	cyclones	90.00% ID003
EPA SCC# 3-04-007-06		PM-10	0.54	35.5	3.5	cyclones	90.00%
sand kiln and cooler constructed in 1960							
	Heat input (MMBtu/hr)	Pollutant	Ef (lb/MMCF)	Ebc (ton/yr)			
	10.8	PM	11.2	0.53			
		PM-10	11.2	0.53			
		SO2	0.6	0.03			
		NOx	94	4.45			
		VOC	7.3	0.35			
		CO	40	1.89			

Allowable Emissions:

Limits pursuant to 326 IAC 6-1-10.1 (PM10 emission limits)

0.636 lbs/ton = 9.54 lbs/hr = 41.7852 tons/yr (will comply)

16.290 lbs/hr = 71.3502 tons/yr (will comply)

Process	Electrode Usage (#/hr)	Weight of electrode (lbs)	Pollutant	Ef (lb/lb)	Ebc (ton/yr)
stick welding	578	0.1625	PM	0.015	6.1709
15 stations			PM-10	0.015	6.1709
constructed in 1994			Mn	0.0	0.4937
			Ni	0.0	0.4114
			Cr	0.002	0.8228

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations):

$$\frac{0.03 \text{ gr/dscf} \times 8740 \text{ acfm} \times \frac{60 \text{ min/hr}}{7000 \text{ gr/lb}}}{1} = 2.25 \text{ lbs/hr} = 9.84 \text{ tons/yr (will comply)}$$

Process	Electrode Usage (lbs/hr)	Pollutant	Ef (lb/lb)	Ebc (ton/yr)
carbon arc	17.5	PM	0.037	2.8361
washing		PM-10	0.037	2.8361
constructed in 1994				

Allowable Emissions:

The following calculations determine PM compliance with 326 IAC 6-1-2 (Nonattainment Area Particulate Limitations):

$$\frac{0.03 \text{ gr/dscf} \times 12000 \text{ acfm} \times \frac{60 \text{ min/hr}}{7000 \text{ gr/lb}}}{1} = 3.09 \text{ lbs/hr} = 13.52 \text{ tons/yr (will comply)}$$

The total potential emissions from all units constructed in 1994 are summarized below.

Total Potential Emissions Before Controls (tons/year)		PSD/Emission Offset Significance levels	
PM	9.01	<	25
PM-10	9.01	<	15

American Steel Foundries
3761 Canal Street, East Chicago, IN 46312

TV #: 089-5973
Plt. ID #: 089-00302

Total Potential Emissions
Before Controls
(tons/year)

PM	4486.84
PM-10	1485.80
SO2	11.08
NOx	8.95
VOC	854.09
CO	767.11
Lead	0.00

Total Potential Emissions
After Controls
(tons/year)

PM	294.36
PM-10	223.92
SO2	11.08
NOx	8.95
VOC	854.09
CO	767.11
Lead	0.00

Appendix A: Emissions Calculations
VOC, HAPs, and Particulate
From Surface Coating Operations

Company Name: American Steel Foundries
Address City IN Zip: 3761 Canal Street, East Chicago, IN 46312
CP: 089-5973
Plt ID: 089-00302
Reviewer: Nisha Sizemore

Material	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	Lb VOC /gal solids	Transfer Efficiency
Booth 15-N-001																
Flat Black W/B Enamel	9.84	59.20%	46.9%	12.3%	55.5%	27.60%	0.139000	20.000	2.72	1.21	3.36	80.75	14.74	24.44	4.39	50%
State Potential Emissions Emissions after controls											3.36	80.75	14.74	24.44	1.96	

Material	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	Lb VOC /gal solids	Transfer Efficiency
Booth 11-D-006																
Blue W/B Alkyd	9.68	59.79%	41.0%	18.8%	47.7%	27.15%	0.041300	55.000	3.47	1.82	4.12	98.95	18.06	19.36	6.69	50%
Black S/G W/B Alkyd	8.80	70.87%	53.7%	17.2%	56.4%	22.24%	0.041300	55.000	3.46	1.51	3.43	82.28	15.02	12.75	6.79	50%
Green W/B Alkyd	10.00	58.69%	43.9%	14.8%	52.7%	26.84%	0.041300	55.000	3.13	1.48	3.36	80.63	14.71	20.55	5.51	50%
Yellow W/B Alkyd	10.25	57.09%	42.7%	14.4%	52.5%	27.07%	0.041300	55.000	3.11	1.47	3.35	80.41	14.67	21.88	5.45	50%
Grey W/B Alkyd	10.26	57.15%	42.8%	14.3%	52.7%	26.97%	0.041300	55.000	3.11	1.47	3.34	80.15	14.63	21.87	5.45	50%
Orange W/B Alkyd	9.83	59.57%	44.6%	15.0%	52.6%	27.04%	0.041300	55.000	3.10	1.47	3.34	80.22	14.64	19.77	5.44	50%
Red W/B Alkyd	10.02	58.38%	43.7%	14.7%	52.5%	27.08%	0.041300	55.000	3.10	1.47	3.35	80.35	14.66	20.75	5.44	50%
State Potential Emissions Emissions after controls											4.12	98.95	18.06	21.88	1.75	
METHODOLOGY																

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % glycol ethers	Weight % MEK	Glycol Ether Emissions (ton/yr)	MEK Emissions (ton/yr)
Booth 15-N-001 (Fifth Wheel)							
Flat Black W/B Enamel	9.84	0.139	20.0	4.00%	2.00%	4.79	2.40

Total State Potential Emissions 4.79 2.40
Totals HAPs 7.19

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Glycol Ethers	Glycol Ethers Emissions (ton/yr)
Booth 11-D-006						
Blue W/B Alkyd	9.68	0.041300	55.000	0.00%	20.00%	19.26
Black S/G W/B Alkyd	8.80	0.041300	55.000	0.00%	20.00%	17.51
Green W/B Alkyd	10.00	0.041300	55.000	0.00%	20.00%	19.90
Yellow W/B Alkyd	10.25	0.041300	55.000	0.00%	20.00%	20.40
Grey W/B Alkyd	10.26	0.041300	55.000	0.00%	20.00%	20.42
Orange W/B Alkyd	9.83	0.041300	55.000	0.00%	20.00%	19.56
Red W/B Alkyd	10.02	0.041300	55.000	0.00%	20.00%	19.94

Total State Potential Emissions 20.42
Totals HAPs 16.14